# Sleep: Case Study [CS-002] Beyond the Wheel: Revealing Hidden Health Risks Impacting Performance

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## Proactive Cognitive Assessments for Enhanced Driver Well-being and Safer Operations

Early Insights, Targeted Interventions—paving the way for safer roads.

Ensuring cognitive health is essential for both individual well-being and operational safety. These case studies demonstrate how proactive cognitive assessments can uncover hidden risks—from substance abuse and undiagnosed medical conditions to stress and distracted driving. By incorporating tools like Impirica's assessments into routine safety protocols, organizations can identify issues early and implement targeted interventions, ultimately fostering a safer, healthier work environment.

## CASE STUDY [001] Substance

#### Summary

Cognitive screening flagged a driver impaired by cocaine use, prompting timely intervention. Early detection prevented incidents and validated cognitive assessments.

## CASE STUDY [002] Sleep

#### **Summary**

Cognitive assessment flagged irregular behavior later attributed to unmanaged sleep apnea. Prompt treatment enabled the driver's safe return.

## CASE STUDY [003] Distraction

#### Summarv

Assessment ruled out impairment and revealed distractions from phone use. This led to refined policies for safer driving.

#### CASE STUDY [004]

#### Heart

#### Summary

A high-risk cognitive score triggered evaluation that uncovered undiagnosed heart disease. Early detection enabled immediate treatment, averting a crisis.

#### CASE STUDY [005]

#### Stress

#### Summary

Assessment revealed performance issues linked to personal stress despite normal medical exams. Addressing these challenges allowed the driver to resume safe operations.

#### CASE STUDY [006]

#### Screening

#### Summary

Cognitive screening flagged a candidate for high-risk behavior during evaluation, preventing unsafe hiring and proving its predictive accuracy.





## CASE STUDY [002] Sleep

#### Context

A driver in the fleet **exhibited irregular driving patterns**, including **erratic lane positioning** and **delayed reaction times**, raising concerns about potential impairment.

#### Disclaimer

Impirica's cognitive assessment does not diagnose medical conditions but assesses risk relative to real-world driving. Medical conditions were uncovered through follow-up protocols.

#### Undetected Health Condition – Sleep Apnea in a Fleet of 1,500+

#### Key Findings

- The driver was subjected to Impirica's cognitive assessment and flagged as high-risk.
- A follow-up evaluation led to the discovery that the driver was suffering from unmanaged sleep apnea, a condition that can severely impact reaction time and focus while driving.

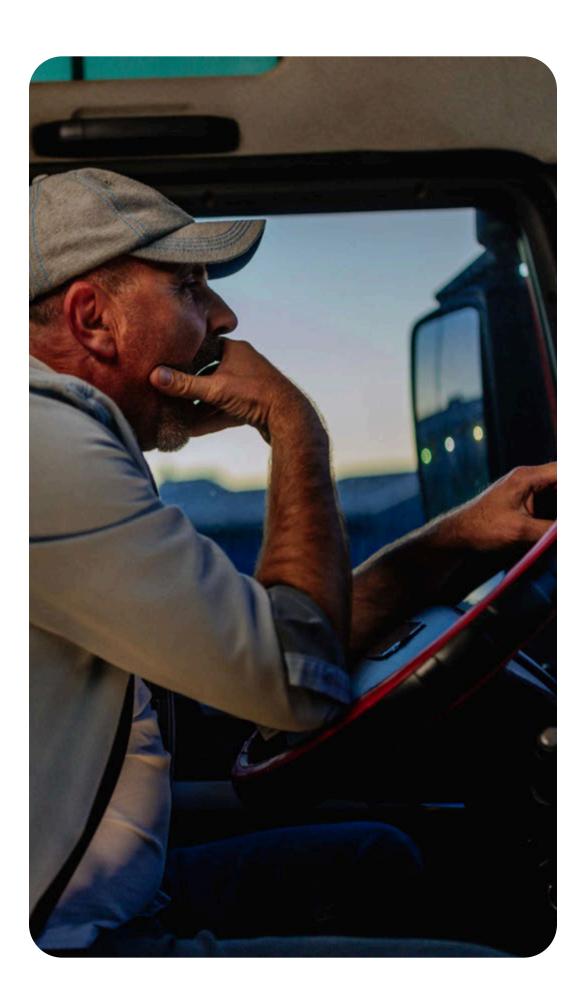
#### **Impact**

- The driver was able to seek treatment and safely return to driving.
- Fleet-wide awareness of sleep-related driving risks increased.
- Ongoing monitoring and wellness initiatives were introduced to promote driver safety.

#### Conclusion

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This case reinforced the value of cognitive assessments in uncovering hidden health conditions and improving driver well-being.



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## Take the next step in workforce safety.

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